

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

UNITED STATES OF AMERICA,

Plaintiff,

v.

MARK A. SCHENA,

Defendant.

Case No. 5:20-cr-00425 EJD

**ORDER ON SENTENCING GUIDELINES
CALCULATION**

On September 1, 2022, the jury found Defendant Mark A. Schena guilty on nine counts, involving health care fraud, wire fraud, illegal kickbacks, and securities fraud.

In their sentencing memoranda, the government and Mr. Schena disputed several findings and conclusions in the Presentence Investigation Report (“PSR”), including the Probation Officer’s application of the U.S. Sentencing Guidelines (“U.S.S.G.”). PSR, ECF No. 237; Def.’s Objections Presentence Investigation Report, Sentencing Memorandum, Motion for Departure (“Def. Sent’g Mem.”), ECF No. 241; United States’ Sentencing Memorandum (“Gov’t Sent’g Mem.”), ECF No. 242; Def.’s Response to Gov’t Sent’g Mem. (“Def. Resp.”), ECF No. 244. On October 12 and 18, 2023, the Court held sentencing hearings and resolved the parties’ objections. This Order memorializes the Court’s findings and reasoning in support of the Guidelines determination made at the sentencing hearing.

For the reasons stated below and on the record at the October 12 and 18 hearings, the Court reiterates that the clear and convincing evidence presented at sentencing supported the findings that (1) the loss was estimated at \$10,586; (2) the offense involved more than ten victims; (3) the offense involved sophisticated means; and (4) the offense substantially endangered the

1 solvency or financial security of a publicly traded company. In conjunction with the unopposed
2 enhancements, the Court determined the total offense level to be 25.

3 **I. LEGAL STANDARD**

4 “All sentencing proceedings begin with the district court’s calculations of the applicable
5 Guidelines range.” *United States v. Prien-Pinto*, 917 F.3d 1155, 1157 (9th Cir. 2019); *see also*
6 *United States v. Staten*, 466 F.3d 708, 710 (9th Cir. 2006) (“[A]lthough district courts are no
7 longer required to follow the United States Sentencing Guidelines . . . ‘the [Sentencing Reform]
8 Act nonetheless requires judges to take account of the Guidelines together with other sentencing
9 goals.’” (quoting *United States v. Booker*, 543 U.S. 220, 259 (2005))).

10 The government bears the burden of proving the facts necessary to enhance a defendant's
11 offense level under the Guidelines. *United States v. Burnett*, 16 F.3d 358, 361 (9th Cir. 1994);
12 *accord United States v. Ameline*, 409 F.3d 1073, 1086 (9th Cir. 2005) (*en banc*) (“[W]hen the
13 government seeks an upward adjustment, it bears the burden of proof.” (citation omitted)). While
14 “the district court may rely on undisputed statements in the PSR at sentencing,” if the defendant
15 objects to those statements “the district court is obligated to resolve the factual dispute, and the
16 government bears the burden of proof to establish the factual predicate. . . . The court may not
17 simply rely on the factual statements” in that report. *Ameline*, 409 F.3d at 1085-86; *see also* Fed.
18 R. Crim. P. 32(i)(3)(B). In making factual determinations, “a sentencing judge is generally not
19 restricted to evidence that would be admissible at trial. However, ‘inadmissible evidence cannot
20 be considered [at sentencing] if it lacks sufficient indicia of reliability to support its probable
21 accuracy.’” *United States v. Egge*, 223 F.3d 1128, 1132 (9th Cir. 2000) (citation omitted,
22 alternation in original).

23 **II. GUIDELINES CALCULATION**

24 Although Mr. Schena made a variety of objections to the PSR, the Court here addresses
25 only those objections and arguments that impacted the final Guidelines calculation, instead of the
26 specific language used in the PSR.

A. Standard of Proof

Although the Government ordinarily need only prove factual findings on sentencing by a “preponderance of the evidence,” if the cumulative effect of Defendant’s disputed enhancements would have an “extremely disproportionate impact” on the sentence, the Government is held to the heightened standard of “clear and convincing evidence.” *See, e.g., United States v. Lonich*, 23 F.4th 881, 910 (9th Cir. 2022). “The Ninth Circuit has focused on three primary factors in assessing disproportionality: (1) whether the increase in sentence is based on the extent of a conspiracy; (2) whether the increase in the number of offense levels is less than or equal to four; and (3) whether the length of the enhanced sentence more than doubles the length of the sentence authorized by the initial sentencing guideline range.” *USA v. Holmes*, 2023 WL 149108, at *2 (N.D. Cal. Jan. 10, 2023).

In his sentencing memorandum, Mr. Schena advocated that the Government be held to the “clear and convincing evidence.” Def. Sent’g Mem. 9. The Government made no express argument in its memorandum as to the correct standard of proof and declined the Court’s invitation at sentencing to be heard on the standard. Given the Government’s lack of opposition and the substantial impact that the disputed enhancements would have on Mr. Schena’s sentence, the Court determined that the appropriate standard of proof was “clear and convincing evidence.”

Accordingly, the Court proceeded to evaluate whether the Government had presented “clear and convincing evidence” in support of its enhancements and factual propositions.

B. Loss Calculation

First and foremost, Mr. Schena raised a variety of arguments supporting his objections to the 24-level increase from the PSR’s loss calculation under U.S.S.G. § 2B1.1(b)(1). PSR ¶ 60. The PSR estimated the total loss to be over \$99 million, which includes the full amounts that Arrayit had billed federal and private insurers (\$77,257,197) and the losses associated with Mr. Schena’s securities fraud scheme (\$21,562,300). *Id.*; *see also* Gov’t Sent’g Mem. 18–19. This amount is more than \$65 million but less than \$150 million, warranting a 24-level enhancement.

Mr. Schena first objected to the use of intended loss (*i.e.*, the amounts that Arrayit had billed to insurers) instead of the actual loss amount (*i.e.*, the amounts that Arrayit actually received

from insurers). Def. Sent’g Mem. 11–15. And even if the Government presented prima facie evidence of intended loss using the amounts billed, Mr. Schena contended that he has rebutted that prima facie showing with trial testimony that he did not intend or believe that he would actually receive the full amounts. *Id.* at 15–16.

Second, Mr. Schena argued that the Government’s evidence supporting its securities fraud loss amount was “guesswork” and challenged the methodology employed by the Government’s expert, Mr. Petron. Def. Sent’g Mem. 16–19; Def. Resp. 4–5.

And finally, Mr. Schena contended that the Government’s loss calculation rested on an improper assumption that each and every claim submitted by Arrayit was fraudulent, noting that the Government had only offered evidence that at best suggested that some percentage of Arrayit’s claims were fraudulent. Def. Sent’g Mem. 19–20.

The Court addresses each of these arguments in turn.

1. Intended vs. Actual Loss

Mr. Schena first argued that the Court should not follow the Sentencing Guideline’s note that stated the “loss is the greater of actual loss or intended loss.” U.S.S.G. § 2B1.1(a)(1) cmt. n.3(A); Def. Sent’g Mem. 11–15. This objection relies heavily on *United States v. Banks*, 55 F.4th 246 (3d Cir. 2022), where the Third Circuit applied recent Supreme Court precedent to hold that the Sentencing Guidelines’ reference to “loss” did not include “intended loss.” *Id.* at 255–58 (citing *Kisor v. Wilkie*, 139 S. Ct. 2400 (2019)). Accordingly, Mr. Schena submitted that the Court may only calculate loss using the actual amounts received from healthcare insurers, not the amounts he billed, *i.e.*, intended to obtain from them.

In reaching its loss calculation at the sentencing hearing, the Court declined Mr. Schena’s invitation to adopt the Third Circuit’s interpretation over the Ninth Circuit’s. Although the Ninth Circuit has not directly considered the vitality of “intended loss” after *Kisor* (which limited the deference that courts may accord to agency interpretations, such as the Sentencing Commission’s commentary), it declined to adopt a novel interpretation of “loss” when confronted with an opportunity to reconsider the appropriate weight given to the Sentencing Guidelines’ commentary. *See United States v. Kirilyuk*, 29 F.4th 1128, 1139 (9th Cir. 2022). To the contrary, the Ninth

Circuit in *Kirilyuk*, 29 F.4th at 1139, acknowledged but did not invoke *Kisor*. Instead, it cited approvingly to *Stinson v. United States*, 508 U.S. 36 (1993), which held that the U.S.S.G. commentary is “authoritative unless it violates the Constitution or a federal statute, or is inconsistent with, or a plainly erroneous reading of, that guideline.” See *Kirilyuk*, (referencing both *Kisor* and *Stinson*); see also, *United States v. Abouammo*, 2022 WL 17734424, at *2 (N.D. Cal. Dec. 16, 2022) (“The Ninth Circuit has explicitly left open the question of whether *Kisor* overrules *Stinson*.”); *United States v. Suris*, 625 F. Supp. 3d 1040, 1046 (C.D. Cal. 2022) (“[T]he Ninth Circuit has yet to apply *Kisor* to guidelines commentary. Instead, the Ninth Circuit continues to apply the standard stated in *Stinson*.”). In short, the Court applied the present law of this circuit, which recognizes the authoritative weight of the Guidelines Commentary.

Because the Sentencing Guidelines’ Commentary are authoritative, the “intended loss” doctrine remained a valid method of loss calculation at the time of sentencing. Additionally, the special rule set forth in the Commentary’s Note 3(F) continued to apply for “intended losses” in health care fraud cases. U.S.S.G. § 2B1.1(a)(1) cmt. n.3(F)(viii) (“[T]he aggregate dollar amount of *fraudulent bills submitted* to the Government health care program shall constitute *prima facie evidence of the amount of the intended loss* . . . if not rebutted.”) (emphasis added). Accordingly, in calculating loss, the Court would apply the burden-shifting framework for health care fraud cases as set forth in *U.S. v. Popov*, 742 F.3d 911 (9th Cir. 2014), to evaluate the evidence of loss amount. In other words, the Government may first rely on “the amount billed to an insurer” as *prima facie* evidence of intended loss, but “the parties may introduce additional evidence to support arguments that the amount billed *overestimates or understates the defendant’s intent*.” *Popov*, 742 F.3d at 916.

Here, Mr. Schena cited various witnesses’ trial testimony as evidence that “it was understood by all members of Arrayit, including Mr. Schena, that Arrayit would not receive the amounts that were submitted to the public or private insurers.” Def. Sent’g Mem. 15. These limited excerpts, however, do not stand for the propositions as presented by Mr. Schena. For instance, Mr. Schena cited testimony that Mark Atwood had informed Mr. Schena that “there’s a certain number of tests that are allowed on Medicare and Medicaid panels.” Trial Tr. 632:11–

633:5. However, this one-time meeting sheds limited light onto Mr. Schena's intentions for how much he intended to obtain from insurers, given that he adopted none of Mr. Atwood's changes and never worked with Mr. Atwood again afterwards. Trial Tr. 632:24–633:5. Similarly, Mr. Schena referenced testimony from Paul Haje that purportedly indicated insurers would not accept the amounts Arrayit billed them. Def. Sent'g Mem. 15. However, Mr. Haje's full testimony actually indicated that, although *some* insurers would not pay \$10,000 for the test, Mr. Schena billed the test for \$10,000 because it was "the maximum that the insurance company *would* pay." Trial Tr. 1600:18–25 (italics added). Rather than rebutting the Government's prima facie case as to intended loss, the circumstantial evidence Mr. Schena cited to depicts him as opportunistically setting the billed amount at the maximum amount an insurer would pay, notwithstanding the possibility that some insurers would *not* pay that amount. Similar showings that lacked supporting documentation or direct testimony of a defendant's intentions have been insufficient to rebut the special rule at U.S.S.G. § 2B1.1(a)(1) cmt. n.3(F). Compare *United States v. Tamarin*, 851 F. App'x 726, 727 (9th Cir. 2021) (rejecting defendant's argument that simply "because of his many years of experience dealing with Medicare billing, [he] was aware that Medicare did not pay the amount billed for medical services") with *United States v. Miranda*, 768 F. App'x 596, 598 (9th Cir. 2019) (finding rebuttal successful where defendant testified at sentencing directly as to his intentions and reimbursement rates).

Accordingly, with respect to any claims that the Government can demonstrate to be fraudulent by "clear and convincing evidence," the Court will determine the amount of intended loss by the amount *billed*, not the amount actually received by Arrayit. However, as discussed below at Section II.B.3, this finding only addresses the *quantum* of loss for fraudulent claims; the Government must still present evidence demonstrating *which* claims were fraudulent for the Court to estimate the total intended loss.

2. Securities Fraud Loss

Mr. Schena also objected to the Government's additional loss calculation of \$21,562,300.81 for losses associated with the securities fraud scheme. Def. Sent'g Mem. 16–19; Def. Resp. 4–5. The Government relied on the expert opinion of Mr. Michael Petron, who had

1 offered a calculation for the loss in equity value of Arrayit’s publicly traded shares. Gov’t Sent’g
2 Mem., Ex. A (“Petron Decl.”), ECF No. 242-1.

3 Mr. Petron’s loss calculation methodology used the first-in, first-out (“FIFO”) valuation
4 method to compare Arrayit’s equity positions starting July 15, 2015 (when the securities fraud
5 scheme purportedly began) and ending April 14, 2020 (when the SEC suspended the trading for
6 two weeks). Petron Decl. ¶ 8. For shares retained after April 2020, Mr. Petron set those shares’
7 “close out” value to \$0. Petron Decl. ¶ 11. Based on the shares’ purchase price and sale prices,
8 Mr. Petron provided the “change in price for each specific share acquired during the securities
9 fraud scheme,” represented by an Excel spreadsheet spanning 27 pages and 2905 rows. Petron
10 Decl. ¶ 12, Ex. 4. After adjusting five individuals’ transactions, Mr. Petron concluded that 2905
11 accounts lost a total of \$21,562,300.81. Petron Decl. ¶ 18.

12 Although Mr. Petron’s FIFO analysis purports to represent the loss in Arrayit equity value
13 between July 2015 and April 2020, the Court determined that his declaration and methods were
14 too broad of a brush to assist the Court’s loss calculation. To begin, the misrepresentation giving
15 rise to the three security fraud convictions are: (1) a November 2018 press release about an
16 “allergy testing agreement” with a multi-billion-dollar company in Palo Alto; (2) an August 2019
17 tweet about “\$240,000,000 test kit manufacturing run”; and (3) March 2020 emails to investors
18 about demand for Arrayit’s COVID-19 tests. Superseding Indictment ¶ 60. Additionally, because
19 there is evidence that Arrayit was “an otherwise legitimate company” that possessed assets and
20 provided some testing services during the relevant time period, *United States v. Zolp*, 479 F.3d
21 715, 719 (9th Cir. 2007), the Court must “attempt to gauge the difference between [the] share
22 price—as inflated through fraudulent representation—and what that price would have been absent
23 the misrepresentation.” *United States v. Berger*, 587 F.3d 1038, 1046–47 (9th Cir. 2009).

24 To that end, Mr. Petron’s analysis did not provide the Court with the relevant analysis or
25 necessary indicia of reliability to reasonably estimate the loss from Mr. Schena’s securities fraud
26 conduct. First, Mr. Petron did not explain why he set a value of \$0 for the shares’ close-out price;
27 he simply noted that he does. Petron Decl. ¶ 11. Although the Government contended that
28 Arrayit stock became “practically worthless” after Mr. Schena was arrested (ECF No. 246, at 5),

such assertions do not satisfy the Government’s burden under *Zolp*, nor do they relieve the Court of its own obligation to account for the residual value of the company. *See Zolp*, 479 F.3d at 720 (rejecting the government’s argument that “the stock nevertheless remained ‘worthless’ because ‘the trading volume is close to zero’” and reasoning that “close to zero is not zero”). The absence of any methodology, calculation, or even raw data that could have allowed the Court to reasonably estimate Arrayit’s residual value raised doubts as to whether Mr. Petron’s analysis could satisfy the Government’s burden.

Second, the Court could not determine from Mr. Petron’s declaration what, if any, analysis was conducted to tether the fluctuations in Arrayit stock price to the three instances of securities fraud conduct charged in the Superseding Indictment. To the best of the Court’s ability, Mr. Petron’s analysis appeared to estimate the amount each individual shareholder’s investment depreciated over time between July 2015 and April 2020. However, Mr. Petron’s calculation does not give any attention to changes in share prices that can be attributed to Mr. Schena’s false disclosures as alleged in Counts Seven (Nov. 2018 press release), Eight (Aug. 2019 tweet), and Nine (Mar. 2020 emails). The depreciation of a company’s equity value may be attributable to a wide variety of causes and—especially where the depreciation was tracked across a lengthy period as Mr. Petron did in his analysis—the Court could not ascertain that the *entirety* of the depreciation was caused by the three instances of Mr. Schena’s conduct. *See, e.g., Berger*, 587 F.3d at 1045–1046 (requiring the sentencing court to find “actual, *defendant-caused* loss occurred” and reversed the court’s “assum[ption] that *defendant-caused* shareholder loss existed”) (emphasis added). Because Mr. Petron’s calculation looked only at the purchase and sale prices for any individual investor’s account, there was no information tethering the loss of such investments to Mr. Schena’s conduct of conviction, which was another deficiency in Mr. Petron’s analysis.

Third, although Mr. Petron briefly described the FIFO method he used (Petron Decl. ¶¶ 11–12) and provided the Court with a spreadsheet listing just the final loss amount for the individual investors (Petron Decl., Ex. 4), his declaration is otherwise devoid of any data or calculations in between that would allow the Court to meaningfully evaluate the analysis. In other words, Mr. Petron did not show his work, and the Court would have been resigned to simply trust

that the final loss amounts accurately reflected the loss caused by Mr. Schena. Indeed, further to this point, Mr. Petron elected to use the FIFO methodology instead of the “modified rescissory method,” because “the Defendant held a significant number of the outstanding shares and the stock was a thinly traded over-the-counter (“OTC”) Pink Sheet stock.” Petron Decl. ¶ 14. Without any background or further elaboration, this explanation is a *non sequitur* that provides little assistance to the Court as to *why* the modified rescissory method would be inappropriate for a “thinly traded” OTC stock or *why* the FIFO method would be more suitable in this case? Although the Court need only make a reasonable estimate of the loss caused by Mr. Schena, the lack of any data or intermediary calculations in Mr. Petron’s declaration left the Court without any meaningful visibility into the methodology to determine whether its resultant estimate was indeed reasonable.

Based on the foregoing, the Court was unable to conclude that Mr. Petron’s declaration reflected the necessary causation analyses the Court was obligated to perform nor did it contain “sufficient indicia of reliability” such that the Court could rely on its calculations to estimate the loss caused by Mr. Schena’s securities fraud violations. Because the Government did not provide any other evidence to substantiate the losses attributable to Mr. Schena’s securities fraud conduct—much less “clear and convincing evidence”—the Court SUSTAINED Mr. Schena’s objection and did not include the Government’s proposed \$21,562,300.81 securities fraud loss amount in the Court’s loss calculation.

3. Health Care Fraud Loss

Finally, Mr. Schena disputed the Government’s “assumption that 100% of the reimbursements submitted by Dr. Chronos on behalf of Arrayit were fraudulent,” contending that the Government at best has only offered evidence that *some* unknown proportion of Arrayit’s claims were fraudulent. Def. Sent’g Mem. 19. The Government submitted a single statement on this point: “[W]here the evidence at trial established that every claim submitted to private and federal insurers was fraudulent because Defendant lied to regulators in order to obtain a CLIA license, it is proper to count all of the claims in calculating the loss amount.” Gov’t Sent’g Mem. 18. The Government provided no case law or record citations in support of this proposition.

1 **a. CLIA Non-Compliance**

2 With respect to the specific theory that the Government offered in its memorandum, the
3 Court is unaware of any case that suggests a CLIA license obtained through false documentation
4 would mean, *ipso facto*, that each and every subsequent claim submitted by the lab was fraudulent.

5 The Government appeared to rely on the general proposition that, without proper CLIA
6 certification, a lab cannot submit any claims for reimbursement and, therefore, none of the insurers
7 in this case would have paid any money to Arrayit. However, the Government did not cite—nor
8 was the Court able to find—a single case where improper CLIA certification or violations played a
9 role in *criminal* sentencing for health care fraud. This may be partially explained by a general
10 observation that similar cases of CLIA misfeasance are often prosecuted—either by the
11 Government or a qui tam relator—as civil actions under the False Claims Act, with deterrence
12 effectuated by treble damages and stiff statutory penalties. *See, e.g., Yates v. Pinellas Hematology*
13 *& Oncology, P.A.*, 21 F.4th 1288, 1295 (11th Cir. 2021) (qui tam action involving laboratory that
14 submitted claims for blood test reimbursements to Medicare without proper CLIA certification);
15 *U.S. ex rel. New Mexico v. Deming Hosp. Corp.*, 992 F. Supp. 2d 1137 (D.N.M. 2013) (qui tam
16 action involving allegations of “numerous CLIA violations” and false representations regarding
17 laboratory’s regulatory compliance). And to the extent that the Government relied on Arrayit’s
18 defective CLIA certification to demonstrate why *all* of Arrayit’s claims were fraudulent, the Court
19 expressed its wariness of using a civil or regulatory violation to supply necessary elements in a
20 criminal case, at least beyond the evidentiary context. *See, e.g., United States v. Eriksen*, 639 F.3d
21 1138, 1150 (9th Cir. 2011), (“[I]t is impermissible to use the violation of a civil statute to *ipso*
22 *facto* ‘supply a crucial element’ of a criminal offense.”); *cf. United States v. Holmes*, 2021 WL
23 2044470, at *10 (N.D. Cal. May 22, 2021) (finding evidence of CLIA violations sufficient to clear
24 Rule 401’s low bar for relevancy as to defendant’s state of mind, intent, and knowledge regarding
25 misrepresentations). This is especially exemplified in the present case where the Government’s
26 theory would require the Court to conclude that misrepresentations made in the CLIA certification
27 process, in and of themselves, could yield a loss calculation that results in a life sentence.

1 In short, the Government’s evidence that Mr. Schena had made false representations to
2 obtain CLIA certification is simply too slender a reed to support the Government’s sweeping
3 conclusion that every claim submitted thereafter was *ipso facto* fraudulent.

4 **b. Other Theories of Fraud**

5 Although the Government had relied solely on evidence of Mr. Schena’s CLIA violations
6 in its sentencing memorandum, the Court recognized that evidence at trial included other theories
7 as to why Arrayit’s claims for reimbursement were fraudulent.¹ And had the Government
8 provided any evidence—even approximations—of what proportions of Arrayit’s total submitted
9 claims reflected indications of any of those frauds, the Court would have been able to review and
10 reasonably estimate the loss amount attributable to Mr. Schena’s health care fraud. However,
11 even after the Court continued the initial sentencing hearing and offered to accept any additional
12 evidence for the Court’s review, the Government did not provide any additional submissions,
13 evidence, or analyses of the total claims that Arrayit submitted. Again, had the Government
14 provided evidence to support even a rough approximation, the Court could have evaluated that
15 figure and reached a conclusion as to whether that estimate was supported by “clear and
16 convincing evidence.” Without such information, however, the Court had no insight into whether
17 the fraudulent claims accounted for 50%, 70%, 100%, or even 10% of the total claims that Arrayit
18 had submitted.² And given that the total amount exceeded \$77 million in this case, the Court was
19 not prepared to draw arbitrary divisions in the loss amount that would have had an “extremely
20 disproportionate impact” on Mr. Schena’s sentence without “clear and convincing evidence.”

21 The absence of evidence or analysis into which of Arrayit’s \$77 million claims were
22 fraudulent also frustrated the Court’s ability to rely on the Guidelines’ Commentary notes

23
24 ¹ At closing arguments, the Government presented no less than six different theories, including
25 Mr. Schena’s efforts to promote allergen blood tests even when not medically necessary, testing
26 for 120 allergens instead of individual allergens, billing for tests that doctors did not order, and
27 seeking reimbursement for claims tainted by illegal kickbacks. *See* Trial Tr. 2560:13–2478:1.

28 ² As one of its final arguments, the Government suggested that—because the Court had heard all
the evidence presented throughout trial—the Court may rely on its own recollection of any
particular witness’s testimony to infer what proportion of Arrayit’s claims were fraudulent.
10/18/23 Hr’g Tr. 13:5–22, 14:21–24. The Court did not—and does not—believe it proper for it
to shoulder the Government’s burden on sentencing and undertake a sprawling *sua sponte* review
of a month-long trial record.

3(F)(viii) and 3(B). With respect to the former, application note 3(F)(viii) only purports to allow the Court to draw presumptions about the “aggregate dollar *amount of fraudulent bills* submitted to the Government health care program”; it does not permit the Court to assume that *all* claims submitted were “fraudulent bills.” U.S.S.G. § 2B1.1(a)(1) cmt. n.3(F)(viii) (emphasis added). Indeed, note 3(F)(viii) would have had effect only *after* the Court had determined which claims were “fraudulent bills.” Similarly, the Court could not use Mr. Schena’s gain as an alternative measure of loss calculation, as permitted by application note 3(B). U.S.S.G. § 2B1.1(a)(1) cmt. n.3(B). The parties neither mentioned nor provided evidence to support the amounts of gain Mr. Schena received. And even if the Court could turn to the \$2.7 million that Mr. Schena actually received from insurers, this figure would still reflect the ambiguities the Court noted above, namely that it had no means to discern which claims were fraudulent and which were legitimate.

Accordingly, although there were several alternative legal theories as to why certain Arrayit claims were fraudulent, the Government did not provide *any* evidence or analysis that would permit the Court to reasonably estimate to what extent Arrayit’s claims were tainted by those particular theories of fraud. Instead, the Government opted to argue that the Court may assume *all* claims were fraudulent as a matter of law because Mr. Schena’s fraud was “pervasive,” a legal doctrine that the Court turns to next.

c. “Pervasive Fraud”

At the sentencing hearing, the Government took the position that the Court may assume all claims that Arrayit submitted were fraudulent because there was evidence of “pervasive fraud.” 10/12/23 Hr’g Tr. 71:20–72:4. This theory was never raised or mentioned in the Government’s sentencing memorandum, and the Court requested the legal authority and evidentiary support for the Government’s position at the sentencing hearing. The Government subsequently provided three cases, and the Court adjourned the hearing to allow both Mr. Schena and the Court to review those cases. After reviewing the proffered cases, the Court found each to be distinguishable from the proposition that the Government was asking the Court to adopt.

To begin, the Government’s recitation of “pervasive fraud” appeared to originate from the Fifth Circuit’s decision in *United States v. Hebron*, 684 F.3d 554 (5th Cir. 2012), which involved a

1 conspiracy to defraud the United States in connection with major disaster relief benefits. In
 2 *Hebron*, both parties had agreed that the loss calculation may “include only fraudulent ones and
 3 not payments to which the town was legitimately entitled” and that there was “no reasonable way
 4 to separate the legitimate FEMA reimbursements from the fraudulent ones.” *Id.* at 561. After
 5 surveying the limited case law available, the Fifth Circuit ultimately held that “where the
 6 government has shown that the fraud was so extensive and pervasive that *separating legitimate*
 7 *benefits from fraudulent ones is not reasonably practicable*, the burden shifts to the defendant to
 8 make a showing that particular amounts are legitimate.” *Id.* at 563 (emphasis added).

9 First, to the best of the Court’s knowledge, no court in the Ninth Circuit—either district or
 10 appellate—has endorsed, applied, or even cited *Hebron*. Even more broadly, the Court has not
 11 identified a single opinion from this circuit where a finding of “pervasive” fraud allowed a
 12 sentencing court to bypass the task of parsing legitimate claims from fraudulent ones in
 13 calculating loss, a task that even *Hebron* had acknowledged. 684 F.3d at 561 (noting that loss
 14 calculation may “include only fraudulent ones and not payments to which the town was
 15 legitimately entitled”). To that end, the Government’s invocation of “pervasive fraud” rests on a
 16 doctrine with uncertain legal underpinnings in the Ninth Circuit.

17 Second, even if *Hebron* was accepted law in this circuit, the Government has presented no
 18 evidence or argument—other than a single conclusory statement, see Gov’t Sent’g Mem. 18—to
 19 demonstrate how Mr. Schena’s fraud was “so extensive and pervasive that separating legitimate
 20 benefits from fraudulent ones is not reasonably practicable.” *Hebron*, 684 F.3d at 563. Had this
 21 theory been clearly communicated or mentioned in the Government’s sentencing memorandum,
 22 Mr. Schena (and the Court) would have received some notice and been better equipped to analyze
 23 the pervasiveness of the fraud. Moreover, contrary to the herculean efforts undertaken by the
 24 probation officer in *Hebron* to reasonably separate fraudulent claims from legitimate ones, *see id.*
 25 684 F.3d at 560–61, the record in this case does not specify what, if any, efforts were made to
 26 distinguish Mr. Schena’s fraudulently submitted claims from the legitimate ones. *See* PSR ¶ 49.
 27 This complete lack of quantitative information regarding the proportion (*i.e.*, pervasiveness) of
 28 fraudulent claims also distinguishes the present case from others where courts have found

“pervasive fraud.” See *United States v. Mesquias*, 29 F.4th 276, 283 (5th Cir. 2022) (affirming “pervasive fraud” finding where there was evidence that “70 to 85 percent of their patients were ineligible for hospice”), cert. denied sub nom. *McInnis v. United States*, 143 S. Ct. 115 (2022); *United States v. Barnes*, 979 F.3d 283, 312 (5th Cir. 2020) (affirming “pervasive fraud” finding where the government had provided “statistical evidence” regarding fraudulent health care coding). Even after the Government raised its “pervasive fraud” theory for the first time at the initial sentencing hearing and the Court invited supplemental sentencing submissions in advance of the second hearing, the Government submitted no additional evidence or analysis, relying instead on general testimony about the offense conduct. 10/18/23 Hr’g Tr. 12:3–13:4.

Accordingly, even assuming that it would be accepted law in the Ninth Circuit, *Hebron*’s “pervasive fraud” doctrine cannot be read to permit such broad strokes and generalized gesticulations to capture the full amounts of a medical provider’s submitted claims as loss.

In addition to *Hebron*, the Government also cited two health care fraud cases from the Ninth Circuit: *United States v. Walter-Eze*, 869 F.3d 891 (9th Cir. 2017), and *United States v. Tcherniavsky*, 708 F. App’x 444 (9th Cir. 2018). However, in both of those cases, the government had proffered detailed analyses and estimated percentages of fraud as to defendants’ total claims, evidence that was not available or presented to this Court. For instance, in *Walter-Eze*, the government had introduced evidence that over “50% of the \$3,432,776 of claims that Walter-Eze submitted to Medicare and Medi-Cal” were for unnecessary power wheelchairs and another 33% of defendant’s claims were tainted by illegal kickbacks for hospital beds and back and knee braces. 869 F.3d at 899, 913 n.4. If the Court here had received similar quantitative evidence, percentages, or even estimations as those in *Walter-Eze*, it too could have drawn reasonable inferences as to Mr. Schena’s total loss amounts. And contrary to the Government’s all-or-nothing loss proposition, even in *Walter-Eze*, the sentencing court found that only “\$2.5 of the \$3.5 million that Ezcor billed to Medicare and Medi-Cal was connected to the fraud,” a finding that was informed in part by the defendant’s wholesale failure to challenge the government’s loss calculation. *Id.* at 913. *Walter-Eze* does not, therefore, stand for the broad proposition that a

1 sentencing court can assume all of a defendant's submitted claims were fraudulent without any
2 information about the compositions of those claims.

3 Similarly, in *Tcherniavsky*, the Ninth Circuit affirmed in a memorandum disposition the
4 district court's finding that the entirety of defendants' business was tainted by fraud. 708 F.
5 App'x at 445. In that case, the government argued at sentencing that—in addition to the
6 \$1,143,028 the defendants had fraudulently billed for power wheelchair and accessories—the
7 court should also include \$377,699 that defendants billed for “smaller” items defendants had
8 billed to “diversify” their submitted claims so as to avoid “red flags” with Medicare. *See* Gov't
9 Sent'g Mem., *U.S. v. Tcherniavsky*, No. 13-CR-0668-TJH (Jan. 5, 2016), ECF No. 113, at 6–8.
10 There, the government had clearly disentangled the fraudulent wheelchair claims from other
11 arguably legitimate claims, allowing the sentencing court to estimate loss based on evidence of
12 distinct and tangible amounts. Here, this Court had no such information to estimate which
13 amounts Mr. Schena billed were, for instance, tainted by kickbacks, related to medically
14 unnecessary allergen tests, or perhaps improperly bundled with COVID-19 tests. Once again, had
15 the Court received the type of evidence or arguments that were available in *Tcherniavsky*, it would
16 not have struggled with the loss calculation as it did here.

17 * * *

18 In summary, the Government's cursory reference to CLIA violations in its sentencing
19 memorandum was simply insufficient by itself to support a finding that all subsequent claims
20 submitted by Arrayit were fraudulent. Even construing the evidence beyond what the Government
21 specifically asserted in its sentencing memorandum, the Court was not provided with any
22 evidence, analysis, or approximation of the fraudulent proportion of Arrayit's claims such that it
23 could make a reasonable estimate of the loss caused by Mr. Schena's offense conduct. Instead of
24 citing specific record evidence or presenting its analyses of the total claims Arrayit had submitted,
25 the Government opted to rely on the application of an out-of-circuit legal doctrine that would have
26 permitted them to entirely bypass the task of parsing out the fraudulent from the legitimate claims.
27 However, when the Government's “pervasive fraud” theory was supported neither by the law of
28 the Ninth Circuit nor by specific evidence that there was “no reasonable way to separate the

legitimate [] reimbursements from the fraudulent ones,” *Hebron*, 684 F.3d at 561, the Court had no other methods or information to estimate loss.

To be clear, the Court has no qualms with a general finding that Mr. Schena’s conduct of conviction resulted in losses—indeed, quite substantial ones—to health care insurers. However, the Government provided no evidence regarding the amount or proportion of that loss attributable to Mr. Schena’s conduct, thereby leaving the Court with the decision to either adopt the Government’s entire loss amount or only the amounts that the jury convicted Mr. Schena on. And because the burden at sentencing rested with the Government and the Government failed to meet its burden of “clear and convincing evidence,” the Court ultimately SUSTAINED Mr. Schena’s objections as to the PSR’s loss calculation under U.S.S.G. § 2B1.1(b). The Court concluded that the evidence at sentencing could only support a reasonable estimate of \$10,586, which accounted for the sum of the losses in Counts 2 and 3 of the Superseding Indictment.

C. Victim Count

If a defendant’s offense involved 10 or more victims, then U.S.S.G § 2B1.1(b)(2)(A) instructs that the defendant shall receive a two-level increase in offense level.

Although the Probation Officer did not initially include this enhancement in the PSR, the Government requested that the PSR reflect this enhancement based on the investors who had lost money based on Mr. Petron’s compiled spreadsheet. Gov’t Sent’g Mem. 23–24. However, the Government did not present “clear and convincing evidence” as to what, if any, amounts of the Arrayit share price could be attributable to Mr. Schena’s fraud (*see supra* Section B.2). For the reasons previously stated, the Court was unable to rely on Mr. Petron’s compiled list to determine the number of investor victims.

However, the Court found that the multiple victim impact statements it received *would* satisfy the “clear and convincing” threshold as to the number of victims involved with Mr. Schena’s offense. The Government indicated that it had received approximately thirty-five (35) victim impact statements, which included personal experiences from shareholders who had invested and lost their money from investing in Arrayit. Gov’t Sent’g Mem. 28–29, 35; PSR ¶ 50. Accordingly, the Court OVERRULED Mr. Schena’s objection as to this enhancement.

D. Sophisticated Means

Pursuant to U.S.S.G. § 2B1.1(b)(10), the offense level will be increased by two levels if the offense “involved sophisticated means and the defendant intentionally engaged in or caused the conduct constituting sophisticated means.”

Mr. Schena objected to this enhancement, arguing that the core offense conduct was simply making false statements about the company and submitting claims for unnecessary allergy tests. He also argued that “[t]here was no evidence of use of falsified documents . . . that were used to conceal or mislead.” Def. Sent’g Mem. 20.

The Sentencing Guidelines’ Commentary describes “sophisticated means” as “especially complex or especially intricate offense conduct,” such as hiding assets or transactions using fictitious entities, corporate shells, offshore financial accounts, or locating offices in different jurisdictions. U.S.S.G. § 2B1.1, Appl. Note 9(B). More relevantly, the Ninth Circuit has upheld this enhancement in Medicare fraud cases where the scheme “depended on [defendant’s] specialized knowledge of the Medicare system,” even though the scheme itself was not “singularly or uniquely sophisticated.” *United States v. Little*, 230 F. App’x 701, 703 (9th Cir. 2007); *see also United States v. Popov*, 555 F. App’x 671, 675 (9th Cir. 2014) (affirming enhancement where defendants applied for Medicare provider numbers and signed false patient charts).

The Court found the “sophisticated means” enhancement to be supported by clear and convincing evidence. Mr. Schena applied for CLIA laboratory certification using false and fraudulent information (PSR ¶¶ 28–29), staffed the lab with a director who never conducted a full test at the lab and only visited the lab a few times per year (Trial Tr. 1767:9–11, 1773:16–1774:25), developed a bundled multi-allergen test that was specifically designed to take advantage of insurer’s reimbursements by allergen tested (Trial Tr. 1364:23–24), and announced fake partnerships with Sutter Health and Palo Alto Medical Foundation that elicited a cease-and-desist letter (Trial Tr. 1175:7–17). This evidence before the Court clearly and convincingly depicted fraudulent conduct that pursued sophisticated and complex interests (*e.g.*, CLIA certification, insurance overpayment, investor inducement) using sophisticated and complex means (*e.g.*, sham director, bundled 120-allergen tests, fictitious business partnerships, respectively).

1 Mr. Schena's objection was OVERRULED on this enhancement.

2 **E. Solvency of Publicly Traded Company**

3 Finally, the Sentencing Guidelines permit a four-level increase if the offense "substantially
4 endangered the solvency or financial security of an organization that . . . was a publicly traded
5 company." U.S.S.G. § 2B1.1(b)(17)(B).

6 Mr. Schena objected to this enhancement, relying on the Government's own argument that
7 he had fraudulently concealed the fact that Arrayit was a failing company and already insolvent.
8 Accordingly, Mr. Schena argued, he could not have endangered the solvency of an already
9 insolvent company. Def. Sent'g Mem. 22. Mr. Schena also noted that Arrayit's stock was only
10 temporarily suspended by the SEC but never delisted and that the stock traded stably after the
11 suspension expired. *Id.*

12 In overruling the objection, the Court relied on Application Note 14(B), which set forth a
13 non-exhaustive list of factors for determining whether the solvency of a publicly traded company
14 was substantially endangered by a defendant's offenses. U.S.S.G. § 2B1.1 cmt. n.14(B). Most
15 notably, this list includes whether the "organization suffered a substantial reduction in the value of
16 its equity securities" and whether the "liquidity of the equity securities of a publicly traded
17 company was substantially endangered [such as if] trading of the company's securities was halted
18 for more than one full trading day." *Id.* at n.14(B)(ii)(III)–(VI). Both of these had occurred
19 during the relevant time period. Most notably, the SEC suspended trading of Arrayit stock due to
20 "questions regarding the accuracy and adequacy of publicly-available information concerning
21 Arrayit Corporation, including: (a) its financial condition and its operations . . . and (b)
22 information in the marketplace . . . claiming the Company developed an approved COVID-19
23 blood test." *See Arrayit Corp.*, Release No. 88623, 2020 WL 1873291, Order of Suspension of
24 Trading (SEC Apr. 13, 2020). Both reasons cited for the SEC's suspension were caused by Mr.
25 Schena's conduct as charged in the Superseding Indictment. *See* Superseding Indictment ¶¶ 31
26 (alleging a scheme involving failure to provide accurate financial statements and concealing
27 Arrayit's financial condition); 60 (noting that Count Nine relates to Defendant's "emails to
28 investors about demand for Arrayit's COVID-19 tests").

Accordingly, the Court found that there was “clear and convincing evidence” that Mr. Schena’s offense conduct—*i.e.*, misrepresentations regarding Arrayit’s financial conditions, operations, and COVID-19 blood test—“substantially endangered” the liquidity of Arrayit’s equity securities, as demonstrated by the SEC’s suspension. These findings warranted the enhancement set forth at U.S.S.G. § 2B1.1(b)(17), and the Court OVERRULED Mr. Schena’s objection to this enhancement.


F. Requested Departure

Finally, Mr. Schena requested a downward departure under U.S.S.G. § 2B1.1, because the Guidelines calculation “substantially overstates the seriousness of the offense.” Def. Sent’g Mem. 23. However, because the Court ultimately arrived at an offense level that was significantly below Mr. Schena’s calculated offense level of 33, the Court did not find that the Guidelines calculation it reached to “substantially overstate[] the seriousness of the offense.” Accordingly, the Court DENIED Mr. Schena’s request for an additional downward departure.

III. FINAL GUIDELINES CALCULATION

To summarize, the Court found that the Government had presented clear and convincing evidence to support the following findings: (1) a loss amount of \$10,586; (2) the offense involved more than ten victims; (3) the offense involved sophisticated means; and (4) the offense substantially endangered the solvency or financial security of a publicly traded company. Mr. Schena did not object to the four-level enhancement under U.S.S.G § 2B1.1(b)(20)(A) and the four-level adjustment under U.S.S.G. § 3B1.1(a). In conjunction with the base offense level of 7, the Court determined that the final sentencing guidelines’ offense level for Mr. Schena was 25.

Dated: November 6, 2023


 EDWARD J. DAVILA
 United States District Judge